AMERICAN MUSEUM NOVITATES

Number 975 Published by THE AMERICAN MUSEUM OF NATURAL HISTORY New York City May 4, 1938

NEW AMERICAN DIPTERA

By C. H. Curran

In the following pages descriptions of a number of new American flies are contained. Unless otherwise stated the types are in The American Museum of Natural History.

Syrphidae

Volucella pinkusi, new species

Related to *cinctiventris* Curran but with black-haired thorax. Length, 10 mm.

Male.—Head black in ground color, the occiput, middle of face above and the sides of the face cinereous pollinose; an incomplete stripe separates the face and cheeks while another yellow stripe crosses the cheek and extends anteriorly along the oral margin. Pile yellow, brown on the eyes and black on the vertical and frontal triangles. Face moderately produced downward, the tubercle large. Antennae brownish red, the arista black on the apical half and with black rays; third segment regular in outline, gently tapering, twice as long as wide.

Thorax blackish green, the disc of the mesonotum with a watery greenish opalescence. Humeri and posterior calli yellowish, the pleural sutures mostly reddish; scutellum dull reddish yellow, with deep, transverse preapical depression. Hair and bristles black, the mesonotum with mostly yellowish pile in front of the suture.

Legs black, only the knees narrowly reddish.

Wings pale brownish, paler posteriorly; marginal cell closed just before the costa.

Abdomen brownish with very strong green and violaceous reflections, the first segment dull yellowish, the second dull reddish with a median vitta, posterior border and sides dark. Pile black. Venter dark green and violaceous, the genitalia black; first sternite mostly yellowish, pile black, yellow at the base.

Types.—Holotype, male, and two paratypes, males, St. Anne, Trinidad, August 20, 1933 (A. S. Pinkus).

Baccha abata, new species

Readily distinguished from *placiva* williston by the long-haired scutellum and abdominal markings. Length, 10.5 mm.

Female.—Front shining black with the sides very broadly reddish yellow in front of the ocelli, the upper fourth dulled by brownish pollen; pile black.

Occiput black in ground color, gray pollinose, the pile yellow; upper occipital cilia black. Cheeks and face reddish yellow and with yellow pile; facial tubercle moderately strong, the face strongly receding below the tubercle. Antennae reddish, the third segment broadly brown above; arista black; third segment about as wide as long, the apex obtusely rounded.

Mesonotum black with strong bronze reflection, with a linear median and a pair of rather broad sub-median reddish-brown pollinose vittae; broad sides and scutellum yellowish; pile brownish yellow, black posteriorly and on the scutellum; yellow on the sides and pleura; no distinct ventral scutellar fringe. Pleura reddish yellow, very broadly black posteriorly; mesosternum below and the metanotum black.

Legs reddish; posterior femora with a faint brown band on the apical fourth, their tibiae with one on the basal third and a darker band covering almost the apical third; pile yellow, black on the middle femora and on the posterior femora and tibiae.

Wings tinged with brown; the subcostal cell brown. Apical crossvein sinuous.

Abdomen brownish black, the first segment mostly yellowish. Second segment with the broad sides reddish on the anterior three-fourths and with a small, subtriangular yellow spot behind the middle toward each side; on the posterior half with an opaque black triangle that is broadly separated from the posterior and lateral margins. Third segment with a broad black median vitta beginning at the basal fifth and extending to the apical fourth where it expands forming a broad, incomplete opaque fascia; in front of the posterior arms of the opaque fascia is an obscurely kidney-shaped yellow spot. Fourth segment with a broad, median opaque black vitta on the anterior two-thirds and a subtriangular opaque black spot lying mostly behind the middle of the segment and projecting triangularly forward into a very broad yellow spot that extends backward from the base of the segment. The yellow spot widens posteriorly so that it forms a very rugged Y. On the fifth segment there are three opaque black vittae, the median one extending from the base to the apical fourth, the sub-lateral ones abbreviated at both ends; between them there lies a yellow vitta extending from the base to beyond the middle of the segment; sixth segment wholly shining brownish. Pile short and black; long and yellow on the sides of the first segment. Venter mostly yellowish; first sternite wholly yellow, the second with a narrow median vitta and the sub-apical half brown; third sternite apparently almost all yellowish, the fourth with a preapical fascia and lateral triangle that do not reach the base of the segment, black; fifth sternite with large lateral triangles of black, the sixth wholly yellow.

HOLOTYPE.—Female, C. de Jordao, São Paulo, Brazil, January 3, 1936 (F. Lane).

Eristalis fasciculata, new species

Related to *meigenii* Wiedemann but the scutellum is shining reddish brown, semitranslucent; there is a pair of obscure ashy spots in front of the scutellum and the posterior trochanters of the male bear a tuft of yellow hair posteriorly. Length, 9 to 10.5 mm.

MALE.—Face densely grayish or grayish-yellow pollinose and with yellow pile, a shining black vitta extending from the oral margin to the upper end of the tubercle. Frontal triangle thickly reddish-brown pollinose and black pilose, a shining black, low tubercle immediately above the reddish lunula. Vertical triangle dull black, with pale pollen in front of the ocelli, the pile black. Occiput subopaque black above, cinereous white on the lower three-fourths, the pile yellowish white; some long black hairs above along the orbits. Cheeks broadly shining black in front.

Antennae blackish, arista bare. Eyes touching for a distance equal to the width of the ocellar triangle, thickly brown pilose, the pile becoming pale below.

Mesonotum opaque black or brownish, the sides with more or less steel-blue tinge in some views; suture narrowly bordered with whitish pollen; a pair of whitish pollinose spots visible in front of the scutellum from anterior view; pile black posteriorly but mostly yellow in front of the suture. Scutellum shining brownish red to reddish brown, the sides darker, the pile black except on the sides. Pleura with bluish tinge, thinly clothed with cinereous white pollen and wholly pale yellow pilose.

Legs black, the tibiae brownish; apices of the anterior four femora and the basal third or more of their tibiae yellow; apices of posterior femora brown, the base of their tibiae yellow; first segment of the middle tarsi reddish. Pile yellowish, black on the apical four segments of the tarsi. Posterior trochanters with fascicle of yellow hair.

Wings hyaline with brown veins. Stigmal spot brown, the submarginal cell luteous, stem of second vein black setulose above.

Abdomen opaque black, with pale reddish-yellow markings and shining metallic fasciae. First segment shining black beneath the scutellum. Second with a large, subtriangular reddish-yellow spot on each side extending from the base to the apex and broadly produced inwardly at the middle of the segment, the lateral margin of the segment narrowly black on the apical two-thirds. Third segment with a large, basal rectangular yellow spot on each side, extending to the apical third; across the middle with an aeneous band that is broadly interrupted on the inner part of the yellow ground and usually narrowly interrupted by opaque black in the middle. Fourth segment with an entire black or aeneous fascia across the middle. Apices of the second to fourth segments yellow. Pile black, yellow on the first segment, basal half of the second (except at the sides, where the black pile extends forward to the basal third) on the sides of the following segments, on the genitalia and whole under surface. Genitalia shining black.

FEMALE.—The abdomen may be all black but the second segment is usually marked as in the male; when all black the usually pale areas have a slight grayish sheen and are replaced behind by a broad opaque black fascia, the apices of the segments narrowly yellow. The shining fasciae may be narrowly interrupted in the middle or entire; the fifth segment is shining black on the apical two-thirds. Front of moderate width, widening on the anterior two-thirds, gray pollinose with a more or less entire band of brown pollen immediately above the antennae and with three opaque black spots above, one covering the large ocellar triangle and one on either side in front of the ocelli. The frontal pile and that behind the eyes on the upper fifth is wholly black.

TYPES.—Holotype, male, allotype, female, São Paulo, Brazil, November, 1936 (J. Lane). Paratypes, two males and four females, same data.

In the key published in Bull. Amer. Mus. Nat. Hist., LXVI, p. 407, this species traces to *assimilis* Macquart, couplet 58. It differs in many respects, but the blackish scutellum at once distinguishes it.

In the couplet mentioned the name *philippii* Schiner should be replaced by *elegans* Blanchard, the two names referring to the same species. In couplet 41 of the same key *urotaenia* Curran should be replaced by *taenia* Wiedemann.

Otitidae

Euxesta pechumani, new species

Differs from *costalis* Fabricius in having the median brown fascia on the wing much narrower and rarely extending behind the third vein, the apex of the abdomen of the female is not yellowish and the front of both sexes is narrower. Differs from *mitis* Curran (Puerto Rico) in having the median brown fascia on the wing narrow, as well as in other respects. Length, 3.5 to 4 mm.

MALE.—Head black, sometimes with strong bluish-green reflections on the bare areas. Front almost one-half longer than wide, reddish, with the vertex, lateral triangles and the ocellar triangle shining black, sometimes brownish red above the middle; hair coarse and black; a white pollinose fascia extends across the middle, consisting of a narrow triangle along each orbit and a very shallow W-shaped mark connecting them. Posterior orbits white pollinose, broadly so below. Upper half of the face and the parafacials and cheeks white pollinose, the parafacials and cheeks reddish in ground color; oral margin and clypeus shining black, the latter sometimes with slight reddish tinge in the middle. Palpi black. Antennae reddish, the third segment very broadly brown above; arista black.

Thorax shining aeneous or with bluish reflections, the color somewhat concealed by cinereous white pollen; scutellum blackish, slightly dulled on the disc.

Legs blackish or brownish, the trochanters, knees, tips of the tibiae and the basal tarsal segment yellowish, the tibiae brownish, but the middle pair may be of a brownish-yellow color.

Wings hyaline, with a very narrow brown fascia before the middle extending from the costa to the third vein, rarely to the fourth, and a large, subtriangular brown spot apically, this latter extending back to the middle of the apical cell. Squamae whitish; knobs of halteres reddish.

Abdomen shining black with metallic greenish or a coppery reflection; hair black.

FEMALE.—Agrees with the male. The ovipositor is black and there is no trace of yellow on the abdomen.

TYPES.—Holotype, male, Bronx, New York City, August 24, 1935; allotype, female, Bronx, August 26, 1935; paratypes, two females, one from New York City, August 21, 1935, the other from Yonkers, New York, August 5, 1935, all collected by L. L. Pechuman.

Lauxaniidae

GRIPHONEURA SCHINER

Following is a key to the American species:

1.—Thorax rusty reddish yellow..... *ferruginea* Schiner.
Thorax mostly blackish.....2.
2.—Front coxae yellow.....3.
Coxae black or brown.....4.
3.—Apex of the wing white, the apex of the fourth vein pale yellow; tibiae blackish ..... *alboapicata* Malloch.
Wings almost uniform in color or the veins faintly clouded with brown; legs reddish yellow, the femora somewhat darkened at the apex..... ..... *tarsalis*, new species.

4.—Crossveins with brown clouds, the wing largely brown.....*triangulata* Hendel.
Anterior crossvein never with brown cloud.....5.
5.—The brown wing cloud begins at or near the apex of the first vein and covers, in part, the whole apical half of the wing.....6.
The brown cloud begins far beyond the apex of the first vein and does not extend basally to the middle of the wing.....7.
6.—Third antennal segment black, the brown of the wing extending back from the tip of the first vein to the posterior margin (*atricornis* Malloch, not Kertesz).
.....*nigricornis*, new name.
Third antennal segment reddish; basal half of the wing pale except in front..
.....*suffusa* Malloch.
7.—Second to fourth veins pale yellow before the brown cloud; sicatrix of front tarsi not over two-thirds as long as the first segment....*imbuta* Wiedemann.
Second and third veins luteous or pale brownish; sicatrix on first segment of anterior tarsi occupying almost four-fifths of the segment...*affinis* Malloch.

Griphoneura tarsalis, new species

Blackish brown and reddish, with cinereous and brownish pollen; front tarsi white, the apical segments black and much broadened. Length, 6 mm.

MALE.—Head reddish, the face, cheeks and anterior border of the front yellowish. Front slightly longer than wide, the pollen brownish yellow, the sublateral vittae shining. Ocellars rather short. Occiput shining except below where it is whitish pollinose. Palpi reddish; proboscis reddish brown. Antennae orange, the arista black, moderately long plumose.

Thorax blackish brown, cinereous pollinose, the mesonotum mostly brown pollinose, pale in front and on the sides behind. Anterior border of the thorax, the posterior calli, metanotum and sternum reddish. Three dorsocentrals.

Legs reddish, the apical two tarsal segments black; the apical two segments of the front tarsi broadened and lengthened, the front tarsi white, the base reddish. Apices of the femora somewhat brownish.

Wings pale brownish luteous, the immediate base pale yellowish. Squamae yellowish, with brown fringe. Halteres yellow.

Abdomen blackish brown, with thin brown pollen. Sternites brownish red.

TYPES.—Holotype, male, and three paratypes, males, Barro Colorado, Canal Zone, December 22 and 29, 1938 (Curran).

Muscidae

Gymnodia scatophaga, new species

Differs from *normata* Bigot by having blackish-brown vittae on the mesonotum and only two antero-ventral bristles near the base of the posterior femora. In *normata* the mesonotal vittae are of a more reddish brown, the pollen more ochraceous between the vittae and in addition to the two strong ones there are two or three shorter bristles on the anteroventral surface of the posterior femora. The mesonotal vittae are much more sharply defined in *scatophaga*. Length, 5 mm.

MALE.—Face and front silvery white pollinose, the occiput cinereous; hair and bristles black. Front narrow above, the brown vitta obsolete for almost one-

third its length; six pairs of short frontals limited to the anterior half of the front; ocellars long and strong; no verticals. Cheeks with strong brown tinge. Facial depression wide, the parafacials narrow and of a uniform width. Palpi dark reddish with the apical third black. Antennae brown; arista practically bare, thickened on the basal fourth. Eyes bare.

Thorax cinereous pollinose, with seven blackish-brown vittae; median vitta wide and entire, extending to the apical fourth of the scutellum; dorsocentral vittae extending from the front margin to the posterior dorsocentral bristle; the second pair of paired vittae extends back from the suture to the supra-alar bristle and is joined to the dorsocentral vittae along the suture; the sublateral vittae extend from the presutural bristle to the base of the wings. In addition to the mesonotal vittae there is a narrow brown stripe extending along the suture separating the mesonotum and pleura from the base of the wings to the humeri. Four postsutural dorsocentrals; sternopleurals 2–1.

Legs black, the tips of the femora and the bases of the tibiae more or less broadly reddish. Anterior tibiae without posterior bristle; posterior femora with only two anterodorsal bristles.

Wings cinereous hyaline; third vein without bristles; fourth vein scarcely curved forward.

Abdomen densely cinereous pollinose, the bristles arising from black or brown spots. Anterior border of the first segment broadly brown, this color produced broadly back on each side of a broad middle stripe of gray. On the second segment there is a pair of subtriangular brown spots which are somewhat variable in size and shape; they are in the form of broadly separated vittae with the posterior half expanded laterally. Third segment with a pair of broadly separated, large shining brown spots posteriorly and a pair of more approximated reddish-brown spots in front, these being obscurely connected with the shining spots; fourth segment with indications of a pair of reddish-brown vittae. The abdomen is mostly yellow on the basal half of the under surface, the pale color extending onto the dorsum on the base of the second segment and expanding to cover part of the first segment inside the dark sides. First sternite strongly haired.

FEMALE.—Pollen of face and front with ochreous tinge; brownish-yellow frontal triangle extending almost to the anterior edge of the front; brown markings on the second and following abdominal segments more extensive, more transverse on the posterior half of the segments, and there are brown marks on the sides of the third and fourth segments basally. There is little or no yellow ground color.

TYPES.—Holotype, male, allotype, female, and paratypes, three males and two females, Haiti, reared from cow dung (J. D. Myers). Type in British Museum of Natural History.

In Huckett's key to North American *Limnophora* Desvoidy this species will run out of the key to males of *Spilogona* Schnabl and Dziedzicki at couplet 51 on page 65, (Jour. N. Y. Ent. Soc., XL). Both *scatophaga*, n. sp., and *normata* Bigot differ from all other species placed in *Gymnodia* Desvoidy and *Spilogona* by the absence of hairs on the prosternum.

Metopiidae

Dexomyophora meyersi, new species

The male differs from *facialis* Townsend by the presence of long hairs on the posterior tibiae. In the female there is usually only one pair of postsutural dorsocentrals, the prescutellar pair absent or extremely weak. There is no small dorsocentral in front of the strong postsutural as described by Townsend. Length, 8.5 to 11 mm.

MALE.—Head golden yellow pollinose, the facial depression and the occiput, with the exception of the orbits, grayish. Front one-third as wide as one eye, the vittae blackish; nine to eleven pairs of frontals, the upper two or three reclinate, ocellars short and fine; outer verticals absent. Hair black, the occiput with white hair in the middle below the neck. Parafacials bare; facial cilia abundant, extending to the upper fourth of the ridges. Palpi and antennae brown, the latter with cinereous pollen, aristal rays long and numerous.

Mesonotum with yellowish or cinereous yellow pollen and three black vittae, the median one extending to beyond the middle of the scutellum, the basal corners of the scutellum also shining black. Pleura cinereous pollinose, the mesopleura yellowish. Acrosticals 0–1, although one or two pairs of presuturals are indicated; dorsocentrals 2–2 or rarely 2–1, the posterior pair absent; three pairs of marginal scutellars, the median pair weak, and one pair of discals; a pair of hairs between the apical scutellars. Three sternopleurals in an almost straight row; propleura with pile but there may be only one or two hairs; prosternum haired.

Legs black, the coxae and femora with cinereous pollen. Posterior tibiae villous postero-ventrally, many of the hairs uniting to form a fasciculate process; posterior trochanter with a dense group of very short hairs below.

Abdomen shining black in ground color, cinereous yellow or yellow pollinose, the fourth segment and sides more or less golden yellow; apices of the segments, a median vitta and expanded areas toward the sides without pollen; under surface with cinereous pollen; hair wholly black. First and second segments without median bristles, the third with one pair of marginals the fourth with a row. Genitalia brownish, cinereous or yellow pollinose. Posterior forceps short and broad, united for most of their length.

FEMALE.—Front two-thirds as wide as one eye, with one or two pairs of orbitals, the upper pair weak when present; facial cilia much longer than in the male; usually only one pair of postsutural dorsocentrals; tibiae and trochanters without unusual hair; ovipositor of simple type.

TYPES.—Holotype, male, allotype, female, and paratypes, five males and three females. Barabuirna, N. W. District, British Guiana, June, July, 1935 (J. G. Myers), reared from *Casnia licoides*. Type in British Museum of Natural History.